



# 192 Hawthorn Road SAP Specification Summary

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## **Building Specification**

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Below are the assessment inputs for the dwelling.

<b>Property Details</b>	
<b>Address</b>	192 Hawthorn Road, Bognor Regis, PO21 2UX
<b>General Notes</b>	Flats modelled – 4, 6, 10

<b>Construction Details</b>		
<b>Element</b>	<b>Details</b>	<b>U-value W/m2K</b>
Existing Floor	Timber floor with mineral wool between joists	0.25
Flat 4 New Floor	Screed, 140 mm Celotex XR4000, concrete floor	0.13
Existing Walls	60 mm Thermaline Super insulation (includes 9.5 mm plasterboard), brick cavity wall.	0.36
New Walls	Plasterboard, low density concrete block, 150 mm Knauf Dritherm 32, outer brickwork	0.18
Wall between stairs and flats	2 players plasterboard, 50 mm mineral wool between studs, brickwork (achieve 0.25 W/m2K with shelter factor)	0.71
Party walls	Solid, or fully filled and sealed cavities	0
Existing roof (insulated ceiling level)	Plasterboard, 450 mm mineral wool between joists	0.12
New flat roof	Plasterboard, insulation between and under joists.	0.11

<b>Openings (windows, door, rooflights)</b>	
Window, external door U-values for new build	1.2 W/m2K
Window, external door U-values for existing building	1.4 W/m2K
Flat front door to stairwell U-value	3.0 W/m2K (0.35 W/m2K with shelter factor)

<b>Heating</b>	
Space heating	Combi boiler (efficiency in line with Part L notional) Winter efficiency – 89.9% Summer efficiency – 80.3%
Emitter	Radiators
Controls	Programmer, room thermostat and TRVs
Secondary heaters	None
Water heating	From main heating (combi) Shower flow rate 8 l/min

<b>Ventilation</b>	
Description	Natural with intermittent extract

<b>Other</b>	
Thermal bridging	Existing building - default $\psi$ value - 0.20 New build – Psi values in line with notional building. Please note values will need calculating.
Lighting	Capacity (lm) equal to 185 x floor area Efficacy 75 lm/W
Air permeability	Existing building - Default 15 m <sup>3</sup> /hm <sup>2</sup> New build – tested to 5 m <sup>3</sup> /hm <sup>2</sup>
Other technologies	Solar PV to generate 6010 kWh/a (based on SAP methodology) Based on SAP this will require approx. 9.88 kWp of solar PV, based on panels installed close to horizontal, with moderate shading. This could be achieved with 25 400 W panels. Note that when showing new build Building Regulations compliance for Flat 4, at least 2.3 kWp of this needs to be assigned to Flat 4 in the modelling.